

Investigation of the Effect of a Liquid ~~PHASE~~
Phase on the Movement of the Gas Stream in a ~~SC~~
Cold Model of a Blast Furnace, by Wang Te-Jung,
L. M. Taylev.

RUSSIAN, per, Invest Ak Nauk SSSR, OTN, Met 1
Toplivo, No 4, 1961, pp 12-17.

HB 6034

Sci-M/M
Jan 64

246,358

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Nov 61

17/11/61

Electrical Conductivity of Oxide in the Titanium
Oxide - Titanium Dioxide System; by V. G. Polakova,
V. I. Sennichenko, 7 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Metall i Spolivo, No 4, 1961.

H. Cygielski, B.Sc., No 1/4/6
115, Brent Lane
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Sci - Chem, Min/Metal

Nov 61

174,555

ORDER FROM NTC

Glazov, V. M.
CONSTRUCTION OF THE SOLIDUS LINE BY THE
METHOD OF MEASURING MICROHARDNESS. [1962]
[7]p. 11 refs.
Order from OTS or SLA \$1.10

62-10640

Trans. of A[kademiya] N[auk] SSSR. O[tdelenie] T[ekhnicheskikh] N[auk]. Izv[estiya]: Met[allurgiya] i Topl[ivo] 1961, no. 4, p. 39-42.

DESCRIPTORS: *Aluminum alloys, *Copper alloys, *Bismuth alloys, Microstructure, Hardness, Grains (Metallurgy), Liquids, Solids, Diffusion, Phase studies, Crystal, Crystallization.

The possibility of using the method of measuring the microhardness to determine the solid line by investigating the composition in the center of grains of alloys not crystallized in equilibrium is analyzed. The method proposed is justified experimentally by the example of (Physics--Solid State, TT, v. 8, no. 6) (over)

62-10640

I. Glazov, V. M.

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Office of Technical Services

Brittle Fracture of Alloyed Steel, by M. P. Drahov
et al.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
No 4, 1961, pp 43-49.

Metal i Toplivo

H. Cygielski, B. Sc, No 3/4-6
115, Brent Lane
Dartford, Kent - England

Sci - Chem, Min/Metal

Nov 61

174,557

Investigation of Titanium-Nickel Alloys, by
A. E. Shakhova, P. B. Budberg.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Metal i Toplivo, No 4, 1961, pp 56-58.

H. Gygielakt, B. Sc., No 4/4/61
119, Brent Lane
Dartford, Kent - England

Sci - Chem, Min/Metal

Nov 61

174,558

Investigation of the Niobium-Molybdenum-
Chromium Alloys, by M. I. Zakharova, D. A.
Prokovshkin.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Metal i Toplivo, No 4, 1961, pp 59-67.

H. Cygielski, B. Sc., No 5/4/61
115, Brent Lane
Dartford, Kent- England

Sci - Chem, Min/Metal

Nov 61

174, 242

Investigation of Alloys in the Niobium-
Aluminium System, by N. A. Nedunov, V. I.
Rabezova.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh. Nauk,
Metal i Toplivo, No 4, 1961, pp 66-70.

H. Cygielski, B. Sc., No 6/4/61
115, Brent Lane
Dartford, Kent - England

Sci - Chem, Min/Metal

Nov 61

174, 243

Hardness and Electrical Resistivity of Titanium-
Chromium-Molybdenum Alloys, by N. V.
Grum-Grzhimaylo, V. G. Gromova.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Metal i Toplivo, No 4, 1961, pp 71-75.

H. Cygielski, B. Sc., No 7/4/61
115, Brent Lane
Dartford, Kent - England

Sci - Chem, Min/Metal

Nov 61

174, 244

Investigation of the Properties of Alloys in the
Titanium-Vanadium-Molybdenum System, by I. I.
Kornilov, R. S. Polyakova.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Metal i Toplivo, No 4, 1961, pp 76-82.

H. Cygielski, B. Sc., No 8/4/61
115, Brent Lane
Dartford, Kent - England

Sci - Chem, Min/Metal

Nov 61

173,600

Effect of Tantalum Carbide on the Composition
and Properties of Cobalt Phase in Titanium
Carbide-Tungsten Carbide-Cobalt Alloys, by R. V.
Rybal'chenko, V. I. Tret'yakov, I. N. Chaporova.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Metal i Toplivo, No 4, 1961, pp 83-89.

H. Cygielski, B. Sc., No 9/4/61
115, Brent Lane
Dartford, Kent - England

Sci - Chem, Min/Metals

Nov 61

Investigation of Some Hard Alloys in the Boron-Silicon-Carbon System, by G. A. Meyerson, et al.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Metal i Toplivo, No 4, 1961, pp 90-94.

H. Cygielski, B. Sc., No 10/4/61
115, Brent Lane
Dartford, Kent - England

Sci - Chem, Min/Metals

Nov 61

HB 5354

Oxidation of Titanium and Tantalum Alloys With
Zirconium at High Temperatures, by R. P. Vortovich,
R. V. Makarova.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Metal i Toplivo, No 4, 1961, pp 95-100.

H. Cygelski, B. Sc., No 11/4/61
115, Brent Lane
Dartford, Kent - England

Sci - Chem, Min/Metals

Nov 61

Plasticity of Ordered Magnesium-Cadmium Alloys,
by K. K. Kasymbekova, A. A. Presnyakov.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Metal i Toplivo, No 4, 1961, pp 101-102.

H. Cygielski, B. Sc., No 12/4/61
115, Brent Lane
Dartford, Kent - England

Sci - Chem, Min/Metals

Nov 61

High Temperature Recrystallization and Strength
Reduction of Magnesium-Manganese-Aluminium-
Calcium Alloys.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Metal i Toplivo, No 4, 1961, pp 103-110.

H. Cygielski, B. Sc., No 13/4/61
115, Brent Lane
Dartford, Kent - England

Sci - Chem, Min/Metals

Nov 61

174, 193

Mutual Solubility of Copper and
Molybdenum and Certain Properties of Alloys
of Molybdenum With Copper, by N. L. Baskin,
A. V. Savin, 8 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, OTN,
Metall i Toplivo, No 4, 1961, pp 111-114.
9698934
FTD-TT-65-1009

Sci - M/M
Feb 66

Plaksin, I. N. and Smirnov, V. N.
ZUR FRAGE DER QUANTITATIVEN KONTROLLE
DER AUFBEREITUNGSPRODUKTE MIT HELFE VON
ALPHA STRAHLEN (On the Quantitative Control of the
Preparation Products by Means of Alpha Rays).
Order from TIB \$1.80

Trans. in German of Akademiya Nauk SSSR. Otdelenie
Tekhnicheskikh Nauk. ~~Vzvestiya: Metallurgiya i~~
~~Toplivo~~, 1961, no. 4, p. 118-122.

DESCRIPTORS: *Control, Mining engineering, *Alpha
spectra

(Engineering, TT, v. 9, no. 11)

62-27335

- I. Plaksin, I. N.
- II. Smirnov, V. N.
- III. Technische Informations-
bibliothek, Hannover
(West Germany)

Office of Technical Services

On the Burning Mechanism of an Atomized Liquid Fuel
in a Turbulent Stream, by S. M. Kogarko, V. Ya.
Basevich, 13 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, OTN, Metal i
Toplivo, No 4, 1961, pp 137-142. 9676296

FTD-TT-62-190

Sci - Fuel

192, 295-

Apr 62

62-27263

Feodotov, M. F.
DIE ROLLE DER EXTRAKTIONSSTOFFE BEI DER
OXYDATION DER STEINKOHLLEN (The Role of Extrac-
tion Matters During Oxidation of Bituminous Coal). 7p.
Order from TIB \$1.45

Trans. in German of Akademiya Nauk SSSR. Otdelenie
Tekhnicheskikh Nauk. Vzvestiya: Metallurgiya i Toplivo,
1961, no. 4, p. 175-178.

DESCRIPTORS: *Oxidation, *Coal, Solvent extraction

(Materials--Fuels, TT, v. 9, no. 11)

I. Feodotov, M. F.
II. Technische Informations-
bibliothek, Hannover

Office of Technical Services

63-10144

Lepinskikh, B. M., Esin, O. A., and Manakov, A. I.
ELECTROLYTIC PRECIPITATION OF CHROMIUM
AND VANADIUM FROM MOLTEN SLAGS. [1962] 6p.
3 refs.

Order from OTS or SLA \$1.10

63-10144

I. Lepinskikh, B. M.
II. Esin, O. A.
III. Manakov, A. I.

Trans. of ~~Akademika~~ ~~Nauk~~ ~~SSSR~~ ~~Obshchestvo~~
~~Tekhnicheskikh Nauk~~ ~~izvestiya~~ ~~Metallurgiya~~ i
~~Toplivo~~, 1961, no. 5, p. 19-21.

DESCRIPTORS: *Electrolysis, *Chemical precipitation,
*Chromium, *Vanadium, *Slags, Impurities, Material
separation, Reduction (Chemistry).

A study was made of the conditions of separate deposi-
tion of chromium and vanadium by electrolysis. It was
found that at current densities lower than 1.1 amp/cm²
vanadium is preferentially deposited on the cathode,
while if the current density is greater than 1.1 amp/cm²,
(Metallurgy, TT, v. 9, no. 10) (over)

Office of Technical Services

Recrystallization of High-Melting Metals
in Welding and Soldering, by
N. V. Grebtsev, G. N. Klebanov, 16 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, OTN,
Metall i Toplivo, No 5, 1961, pp 62-69.
9698946
FTD-TT-65-1010

Sci - M/M
Feb 66

296,387

Raising the Creep Strength of Metallic Alloys by
the Method of Combined Mechanical and Thermal
Treatment, by I. A. Odling, Z. G. Fridman.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Metal i Toplivo, No 5, 1961, pp 75-77.

NLI M. 3640

Sci - Min/Metals
Aug 68

207,168

Savitskii, E. M. and Dashkovskii, A. I.
INVESTIGATION OF INTERNAL FRICTION AS A
METHOD OF PHYSICO-CHEMICAL ANALYSIS OF
METAL ALLOYS. [1963] [14]p. 12 refs.
Order from OTS or SLA \$1.60 63-10907

Trans. of Akademiya Nauk SSSR. Otdelenie Tekh-
nicheskikh Nauk. Izvestiya: Metallurgiya i Toplivo,
1961, no. 5, p. 96-100.

DESCRIPTORS: Metals, *Alloys, *Internal friction,
Crystal structure, Transformations, Temperature,
Reaction kinetics, Analysis.

This paper gives the results of the measurement of
internal friction in several single component and
binary metal systems and an attempt is made to
establish the nature of the variation of the level of in-
ternal friction with the variation of such equilibrium
factors as the temperature and composition.

63-10907

I. Savitskii, E. M.
II. Dashkovskii, A. I.

(Physics--Solid State, TT,
v. 10, no. 2)

Office of Technical Services

Effect of Alloying Upon the Structure and
Properties of Tungsten-Carbide Cobalt Com-
positions, by V. F. Funke, V. I. Tumanov, et al.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
~~YEN~~ Mat i Toplivo, No 5, 1961, pp 101-108.

HB 6056

Sci-M/M

Nov 63

243,452

Action of Ultrasonic Vibrations on the
Shape and Dimensions of Intermetallic Com-
pound Crystals in Aluminum Alloys, by G. I.
Eskin, I. N. Fridlyander.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk, Met i Toplov, No 45, 1961, pp 109-
112.

HB 5460

Sci - Min/Met
Apr 62

190,717

Revyakin, A. V.
DIFFUSION OF OXYGEN IN α -TITANIUM. [1964]
9p 8refs
Order from OTS, SLA, or ETC \$1.10 TT-64-14843

Trans. of Akademiya Nauk SSSR. Otdelentie Tekhnicheskikh Nauk. Izvestiya Metallurgiya i Toplivo, 1961, no. 5, p. 113-116.

(Metallurgy--Light Metals, TT, v. 11, no. 11)

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Nekrasov, Z. I. and Chekin, V. V.
ACTION OF ALTERNATING MAGNETIC FIELD ON
A "BOILING" LAYER OF FERROMAGNETIC PAR-
TICLES. [1963] 6p
Order from OTS or SLA \$1.10 63-20249

Trans. of Akademiya Nauk SSSR. Otdel'enie Tekhni-
cheskikh Nauk. Investitsiya Metallurgiya i Toplivo,
1961, no. 6, p. 25-29.

DESCRIPTORS: *Magnetic fields, *Ferromagnetic ma-
terials, Boiling, Pipes, Nitrogen, Bubbles, Ores (Metal
sources), Electromagnets, Tests,

Action efficiency of the magnetic field on the boiling
layer structure of ferromagnetic particles was investi-
gated in the case of concentrate from the Kerche ore,
enriched by roasting and magnetism, and of which the
iron containing part is mainly magnetite. The experi-
(Physics--Magnetism, TT, v. 10, no. 12) (over)

63-20249

I. Nekrasov, Z. I.
II. Chekin, V. V.

Office of Technical Services

ISOTHERMAL SINTERING OF METALLIC POWDERS UNDER
PRESSURE, BY M. YU. BAL'SHIN, A. A. TROFIKOVA,
15 PP.

RUSSIAN, PER, IZVESTIYA AKADEMII NAUK SSSR,
OTDELENIYE TEKHNIЧЕСКИХ НАУК, METALLURGIYA
I TOPLIVO, NO 6, 1961, PP 45-51.

JPRS 18245

SCI - M/M
APR 63

N L L M 3 6 3 8

225,637

The Continuous Zone-Refining Method, by K. M. Rozin,
V. N. Vigdorovich, et al, 30 pp. 9695956
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Metal i Toplivo, No 6, 1961, pp 56-73.
Amer Meteorol Soc

T-R-439

NLL 7773.75 1965 T-R-439

Sci - Phys
Mar 65

275,032

The Diffusion of Niobium and Carbon in
Niobium and its Carbides by F. V. Gel'd
and V. D. Liubimov, 21 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekhn
Nauk, met i Toplivo, No 6, 1961, pp 119-126.

*12/29/60 - Put on
shelf*

AEC-tr-5954

Sci - Chem
Oct 63

THE HIGH-TEMPERATURE STRENGTH OF INTERMETALLIC
COMPOUNDS, BY I. I. KORNILOV.

RUSSIAN, PER, IZ AK NAUK SSSR, OTDEL TEKH NAUK,
METAL I TOPLIV, NO 6, 1961, PP 130-136.

NLL M. 3772

SCI - MIN/METALS

213,002

OCT 62

Physical Properties of Tungsten Carbide-Cobalt ~~MAX~~ Hard
Metals, by V. I. Tumanov, et al.
RUSSIAN, per, Iz ~~sk~~ Ak Nauk SSSR, Otdel Tekh Nauk Metal
i Toplivo, No 6, 1961, pp 144-148.

HB 6186

Sci - M/M

Mar 64

250,774

BASIC FORMS OF DEFORMATIONAL PLASTICITY
ing at Elevated Temperatures in Polycrystalline
Metals With Face-Centered Cubic Lattice Structure,
by M. G. Lozinskiy.
RUSSIAN, per, Izv. Akad. Nauk SSSR, Otd. Tekh.
Nauk, Met. Toplivo, No 1, 1962, pp 105-126.
*AEC 2436

Sci/Materials
Oct 66

63-22427

Mozorov, A. N. and Novokharskii, I. A.
THERMODYNAMICS OF FERROCHROMITE REDUC-
TION WITH HYDROGEN. [Aug 63] 10 refs.
Order from SIC \$8.00

Trans. of Akademiya Nauk SSSR. Otdelenie Tekhnich-
eskikh Nauk. [Izvestiya Metallurgiya i Toplivo, 1962,
no. 6, p. 3-6.

Also available from SIC in Russian Metallurgy and Fuels
Fuels, 1962, no. 6, \$68.00/year.

DESCRIPTORS: *Iron alloys, *Chromite, *Chromium
compounds, Oxides, Ores (Metal sources), Thermo-
dynamics, Hydrogen, Reduction (Chemistry).

The thermodynamics of the reaction between FeCr_2O_4
and H_2 to give Fe and Cr_2O_3 was studied both by re-
duction with H_2 , and by oxidation of the reduced ore with
steam. The equilibrium constant, free energy change,
(Metallurgy, TT, v. 10, no. 11) (over)

I. Mozorov, A. N.
II. Novokharskii, I. A.
III. Scientific Information
Consultants Ltd.
(Gt. Brit.)

Office of Technical Services

63-22433

Gulyaev, V. N.
"HEALING" OF VACANCIES DURING CREEP AS A
FACTOR IN INCREASING HIGH-TEMPERATURE
STRENGTH. [Aug 63] 10 refs.
Order from SIC \$12.00

Trans. of Akademiya Nauk SSSR. Otdelenie Tekhnicheskikh Nauk. Izvestiya Metallurgiya i Toplivo, 1962, no. 6, p. 103-106.

Also available from SIC in Russian Metallurgy and Fuels, 1962, no. 6, \$68.00/years; another trans. is available from OTS \$1.25 in 63-21627, JPRS-18817. 22 Apr 63, 41p.

DESCRIPTORS: *Steel, Nickel alloys, Manganese alloys, Chromium alloys, *Creep, Metals, Nitrogen, Niobium, *Crystal lattices, Structural properties, *Heat resistant metals and alloys.

(Metallurgy--Structural, TT, v. 10, no. 11) (over)

1. Title: Healing of vacancies
- I. Gulyaev, V. N.
- II. Scientific Information Consultants Ltd. (Gr. Brit.)

Office of Technical Services

63-22435

Oding, I. A. and Liberov, Yu. P.
SUSCEPTIBILITY OF FAILURE OF NICKEL UNDER
STATIC TENSILE LOADING. [Aug 63] 10 refs.
Order from SIC \$12.00

Trans. of Akademiya Nauk SSSR. Otdelenie Tekhnicheskikh Nauk. Izvestiya Metallurgiya i Toplivo, 1962, no. 6, p. 125-130.
Also available from SIC in Russian Metallurgy and Fuels, 1962, no. 6, \$68.00/year.

DESCRIPTORS: *Nickel, Density, Tensile properties, Stresses, Optical analysis, Electron microscopes, Fracture (Mechanics), *Failure (Mechanics), *Loading (Mechanics), Test methods, Cracking

The behaviour of nickel in tensile testing was studied by (1) observing changes in density during test, (2) analysis of the stress-strain curves, particularly true stress (Metallurgy--Nonferrous Metals, TT, v. 10, no. 11)
(over)

I. Oding, I. A.
II. Liberov, Yu. P.
III. Scientific Information
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Shakhova, K. I. and Budberg, P. B.
PHASE EQUILIBRIUM DIAGRAM OF TITANIUM-
NIOBIUM-CHROMIUM ALLOYS. [Aug 63] 4refs
Order from SIC \$12.00

Trans. of Akademiya Nauk SSSR. Otdelenie Tekhnicheskikh Nauk. Izvestiya Metallurgiya i Toplivo, 1962, no. 6, p. 137-141.

Also available from SIC in Russian Metallurgy and Fuels, 1962, no. 6, \$68.00/year

DESCRIPTORS: *Heat resistant metals and alloys,
*Chromium alloys, *Niobium alloys, *Titanium alloys,
Phase studies, Thermodynamics, Quenching (Cooling),
High temperature research

An examination has been made of the region of the ternary Ti-Nb-Cr system which was thought most promising for the development of high-temperature alloys, (Metallurgy, TT, v. 10, no. 11)

63-22437

- I. Shakhova, K. I.
- II. Budberg, P. B.
- III. Scientific Information Consultants Ltd.
(Gr. Brit.)

Office of Technical Services

Kornilov, I. I. and Nartova, T. T.
CREEP STRENGTH AT 700°C OF ALLOYS ON THE
BASE OF Ti6Al COMPOUND. [Aug 63] 19 refs.
Order from SIC \$12.00

Trans. of Akademiya Nauk SSSR. Otdelenie Tekhnicheskikh Nauk. [Investiya Metallurgiya i Toplivo, 1962, no. 6, p. 122-130.]

Also available from SIC in Russian Metallurgy and Fuels, 1962, no. 6, \$68.00/year.

DESCRIPTORS: *Titanium alloys, *Aluminum alloys, *Heat resistant metals and alloys, *Creep, Mechanical properties

Titanium alloys of composition approximating to Ti6Al are shown to have outstanding creep strength at temperatures up to 700°C, being superior to austenitic steels. The results can be explained theoretically.
(SIC abstract)

63-22438

I. Kornilov, I. I.
II. Nartova, T. T.
III. Scientific Information
Consultants Ltd
(Gt. Brit.)

(Metallurgy, TT, v. 10, no. 11)

Office of Technical Services

Electro-motive Forces in a Liquid
Metal-slag System , by O. A. Esin
and L. K. Gavrilov.

RUSSIAN, Izvestiya Akad Nauk SSSR,
OTN Tekhnicheskikh Nauk, 1950, No 7,
pp 1040-1048.

NLL RTS 2679 (On Loan or Purchase)

Aug65

288,872

Pogodin, S. A. and Shpichinetski, E. S.
SOLID SOLUTIONS OF LITHIUM IN LEAD.
14p (8 figs omitted) 9refs
Order from OTS, SLA, or ETC \$1.60 TT-64-16445

Trans. of Akademiya Nauk SSSR, Sektor Fiziko
Khimicheskogo Analiza, Izvestiya 1947, v. 13,
p. 88-95.
Another trans. is available from K-H \$14.00 as K-H
3980 c

TT-64-16445

I. Pogodin, S. A.
II. Shpichinetski, E. S.

(Metallurgy--Nonferrous Metals, TT, v. 12, no. 3)

Office of Technical Services

TT-64-14139

Bergman, A. G.
THE CHEMISTRY OF MULTICOMPONENT SYSTEMS
[Khimiya Mnogokomponentnykh Sistem]. [1963] 14p
(figs omitted).
Order from OTS, SLA, or ETC \$1.60 TT-64-14139

I. Bergman, A. G.
II. RT-2196
III. SLA-R-02790

Trans. of Akademiya Nauk SSSR. Sektor Fiziko-khim-
icheskogo Analiza. Izvestiya, 1949, v. 19, p. 113-119.
Other translations are available from SLA as RT-2196,
15p and R-02790, 8p.

(Chemistry--Physical, TT, v. 11, no. 11)

Office of Technical Services

Study of the Phosphoric Acid-Water
System by the Method of Physicochemical
Analysis, by M. A. Klochko,
M. Sh. Kurbanov, 14 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Sektor Fiz
Anal, Vol XXIV, # 1954, pp 252-263.

OTS 60-17717

Sci
Mar 62
Vol 4, No 4

187, 757

Electrical Conductivity and Viscosity of the
Ammonium Nitrate-Water System, by M. A. Klochko,
G. F. Gubskaya, 12 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Sektor Fiz Khim
Analiza, Vol XXVII, 1956, pp 402-411.

SLA 60-17702

Sci

129,400

OTS, Vol IV, No 3

Sep 60

Spectral Determination of Iridium, Platinum
and Palladium in Refined Rhodium, by A. V.
Babayeva, E. S. Lapid, 7 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Sektor Platiny
i Drug Blag Metal, No 22, 1948, pp 145-148.

National Research
Council TT-825

Sci

Jun 60

118,356

61-31007

Dubovskii, N. V.
THE INTERACTION OF GENES, AFFECTING THE
WING IN DROSOPHILA MELANOGASTER
(Vzaimodeistvie Genov, Deistvuyushchikh na Krylo u
Drosophila Melanogaster). 1962, 6p. 3 refs.
PL-480 HEW.

Order from OTS \$0.50

61-31007

Trans. of Akademiya Nauk SSSR. Izvestiya. [Seriya
Biologicheskaya] 1935, v. 2, [no. 7] p. 1163-1168.

DESCRIPTORS: *Genetics, *Chromosomes,
Drosophila, Wings, Embryology.

The form of the wing plate of Drosophila was studied
to determine the interactions of genes taking part in
the formation of a given body structure. It was found
that the formation of such structures is very complex,
consisting of (1) the complementary reaction of many
genes, (2) frequent "simple superposition", and (3)
(Biological Sciences--Zoology, TT, v. 7, no. 10)
(over)

- I. Dubovskii, N. V.
- II. PL-480 HEW (61-31007)
- III. National Science Foundation,
Washington, D. C.

Office of Technical Services

Preparation of Cyclobutanone, by N. Ya. Dan'yarov,
S. M. Tol'mov.

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1937, pp 529-38. CIA 9051136

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Sci - Med

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Characteristics of Protein Digestion in the Leeches
Hirudo Medicinalis and Haemopsis Sanguisuga., by P.A/
Korzhuev.
RUSSIAN, per Izv. Akad. Nauk. SSSR Ser. Biol. 1937,
pp 907-911
NLL/RTS 2691-12s 6d

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Aug 67

339-472

Hybridization between *Xiphorus Halleri*
and *Platygoecilius Maculatus* by Means
of Artificial Insemination, G. V.

Semenkova, S.

RUSSIAN, per, Investive, Akademika

Nauch BSSR. Seriya Biologicheskaya,

No 4, 1938, pp 975-981.

OTS TR-65-60043

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Recent Wheat Rust Epidemics in North Caucasus and
Factors Favouring their Outbreak and Development,
by I. G. Gellin, UNCLASSIFIED

RUSSIAN, per, Iz Ak Nauk SSSR, No 5-6, 1958,
pp 995.

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Economic - Agriculture

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61-11484

Bel'govskii, M. L.

DEPENDENCE OF THE FREQUENCY OF MINUTE
CHROMOSOME REARRANGEMENTS IN DROSOPHILA
MELANOGASTER UPON X-RAY DOSAGE(Zavisimost' Chastoty Melkikh Perestroek Khromosom
u Drosophila Melanogaster ot Dozy X-Luchei). 1962,
14p. 25 refs. PL-480 HEW.

Order from OTS \$0.50

61-11484

Trans. of Akademiya Nauk SSSR. Izvestiya. [Seriya
Biologicheskaya] 1939 [no. 2] p. 159-170.DESCRIPTORS: Genetics, *Mutations, *X-rays,
*Chromosomes, *Drosophila, Reproduction.

The frequency of minute chromosome rearrangements
in Drosophila melanogaster, as determined by the fre-
quency of yellow "mutations" in the gc^8 chromosome,
varies approximately proportionally to X-ray dosage,
its dependence upon the dosage thus showing no signifi-
(Biological Sciences--Biochemistry, TT, v. 8, no. 2)

(over)

- I. Bel'govskii, M. L.
- II. PL-480 HEW (61-11484)
- III. National Science Foundation,
Washington, D. C.

Office of Technical Services

61-11483

Prokof'eva-Bel'govskaya, A. A.
A CYTOLOGICAL STUDY OF THE BREAKS AT THE
WHITE LOCUS OF THE X-CHROMOSOME IN
DROSOPHILA MELANOGASTER (Tsitologicheskoe
Izucheniye Razlomov X-Khromosomny Drosophila
Melanogaster v Raione Lokusa White). 1962, 13p.

11 refs. PL-480 HEW.

Order from OTS \$0.50

61-11483

Trans. of Akademiya Nauk SSSR. Izvestiya. [Seriya
Biologicheskaya] 1939, no. 2, p. 215-227.

DESCRIPTORS: *Genetics, *Drosophila, *Chromo-
somes, *Mutations, Reproduction, Morphology,
Physiology.

The investigation shows that for mottled to occur it is
not necessary that the X-chromosome break at a
definite point near the white locus.

(Biological Sciences--Biochemistry, TT, v. 8, no. 2)

- I. Prokof'eva-Bel'govskaya,
A. A.
- II. PL-480 HEW (61-11483)
- III. National Science Foundation,
Washington, D. C.

Office of Technical Services

61-11482

Prokof'eva-Bel'govskaya, A. A.
A CYTOLOGICAL STUDY OF THE "SIMPLE BREAKS"
IN THE INERT REGION OF THE SCUTE₆ CHROMO-
SOME OF DROSOPHILA MELANOGASTER (Tsitol-
ficheskoe izucheniye "Prostykh Razryvov" v Inertnom
Raione X-Khromosomy Drosophila Melanogaster).
1962, 11p. 8 refs. PL-480 HEW.
Order from OTS \$0.50

61-11482

Trans. of Akademiya Nauk SSSR. Izvestiya. [Seriya
Biologicheskaya] 1939 [no. 7] p. 349-361.

DESCRIPTORS: *Histology, *Chromosomes, Morphol-
ogy, *Genetics, Reproduction, *Drosophila, Mutations.

The data presented here indicate that there are no
"simple breaks" in the inert regions, i.e. interstitial
genes cannot become terminal. (Author)

(Biological Sciences--Biochemistry, TT, v. 8, no. 2)

- I. Prokof'eva-Bel'govskaya,
A. A.
- II. PL-480 HEW (61-11482)
- III. National Science Foundation,
Washington, D. C.

Office of Technical Services

61-11451

Prokof'eva-Bel'govskaya, A. A.
INERT REGIONS IN THE INNER PART OF THE
X-CHROMOSOME OF DROSOPHILA MELANOGASTER
(Inertnye Raiony Vnutrennikh Chastei X-Khromosomy
Drosophila Melanogaster). 1962, 8p. 15 refs.
PL-480 HEW.

Order from OTS \$0.50

61-11451

Trans. of Akademiya Nauk SSSR. Izvestiya. [Seriya
Biologicheskaya] 1939 [no. 2] p. 352-370.

DESCRIPTORS: *Genetics, *Chromosomes,
*Drosophila, Salivary glands, Anatomy, Mutations,
*Morphology.

Studies revealed the presence of inert regions in seven
segments of the X-chromosome: 2B, 3C3, 3C6, 4C3-7,
11A, 12EF, 15F and 19E3-4. Obviously, these cases
do not embrace all intercalary inert regions of the
X-chromosome. All inert regions in salivary glands
(Biological Sciences--Biochemistry, TT, v. 8, no. 2)

(over)

- I. Prokof'eva-Bel'govskaya,
A. A.
- II. PL-480 HEW (61-11451)
- III. National Science Foundation,
Washington, D. C.

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Artemov, N. M. and Lur'e, R. N.
CONTENT OF ACETYLCHOLINE AND CHOLINES-
TERASE IN TAPEWORM TISSUES, tr. by W. Humel.
8 Aug 50, 12p. (2 figs. omitted) 16 refs.
Order from OTS or SLA \$1.60

61-28094

Trans. of Akademiya Nauk SSSR. (Izvestiya, Seriya
[Biologicheskaya] 1941, no. 2, p. 278-282.

DESCRIPTORS: *Tapeworms, Tissues (Biology),
*Acetylcholines, *Cholinesterase, Determination,
Physiology.

I. Artemov, N. M.
II. Lur'e, R. N.
III. National Institutes of Health,
Bethesda, Md.

(Biological Sciences--Biochemistry, TT, v. 6, no. 12)

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On the Possibility of Induction of
Cartilage Formation in Vitro, by L. F.
Berezkina.

RUSSIAN, per, Izvestiya Akad Nauk SSSR
Seriya Biologicheskaya, No 2, 1943,
pp 67-73.
OTS TT-64-19452

SLA-R-2877

Sci-B&M
Jul 66

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Karyological Study of Some Acari and the
Problem of Sex Determination in the Group,
by I. I. Sokolov, 11 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Ser Biol, No 6,
1945, pp 654-663.

NIH 9-28-63

(Loan)

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Nov 63

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Developmental Cycle of the Tick Hyalomma
Anatolicum Anatolicum Koch,
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Seriya Biologicheskaya, 1946, pp 199-202.
NLL RTS 3369 1946

Sci-B&H
Sept 66

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The Structure and the Development of the
Endoparasitic Mollusk *Parenterochasmus Dogieli*. I.
The Organization of the Adult Animal, by
A. V. Ivanov.

RUSSIAN, per, Izv AN SSSR Ser Biol, No 1, 1947,
pp 3-29.
NLL Ref: 3630.48 (DTC-129)

Sci/BNM
May 69

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Geochemical History of Oxygen and ~~Water~~ Photo-
Synthesis, by A. P. Vinogradov.

RUSSIAN, per, Iz Ak Nauk SSSR, Ser Biol, No 3,
1947, pp 409-422.

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Vol. III, No 11

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Physiological Mutations in Populations, by
N. P. Dubinin, 5 pp.

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Commensalism in Favosites, by B. S. Sokolov.

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No 1, 1948, pp 102-109.

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Sci - Biology
Dec 60

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THE RECEPTORS OF THE KIDNEY. [1960] 20p.
(8 figs. omitted) 34 refs.
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1. Kidneys--Physiology
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2, 1949, pp 109-134.
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The Comparative Pathology of the Skin of
Mammals When Bitten by Ticks. The Effect
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Pavlovskiy, S. P. Alfayeva, 16 pp.
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NIL 25a KTB-2891
HCB-203 145

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32p. refs. [DSR LLU] M2101 (text in German).
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Trans. in German of Adademiya Nauk SSSR. Izvestiya.
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DESCRIPTORS: *Plants, *Reproduction, Theory.

(Biological Sciences--Botany, TT, v. 6, no. 5)

61-13600

I. Ellengorn, Ya. E.
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III. DSR LLU M.2101

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On Two Diseases of Tobacco, by D. I. Ivanovskii.

Full translation.

RUSSIAN, per, Dok Ak Nauk SSSR, Iz Ser Biol, Vol VI,
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3429

The Development of Living Processes in the Pre-cellular Period, by O. B. Lepetskaya, 20 pp.

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The Development of Biological Structure in Avian
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pp 102-109.

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Ivanovskii, D. I.
TWO DISEASES OF TOBACCO. [1964] 25p
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Trans. of Akademiya Nauk SSSR. Izvestiya. Ser[iya]
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TT-64-12942

I. Ivanovskii, D. I.
II. K-H-2018-b
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Tanning matter in Tea Leaf and the Problem of
Improving the Quality of Tea, by A. L. Kursanov, 10 pp.

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Ellengorn, Ya. E., Glushchenko, I. E., and
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EINIGE FRAGEN DER GENESIS DER PFLANZEN-
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p. 12-45 (pub. in Sowjetwissenschaft. Naturwissen-
schaftliche [Beiträge] (West Germany) 1952, v. 5,
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DESCRIPTORS: *Plants, *Cells (Biology), Theory.

I. Ellengorn, Ya. E.
II. Glushchenko, I. E.
III. Afanas'eva, A. S.
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On the Question of Selection, by V. N. Stoletov.

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Economic - Agriculture, plant breeding

Scientific - Biology, plant breeding

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Controlled Variability of Microorganisms, by
V. D. Minnikov, 29 pp.

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The Effect of the State of Catalase Activity
on Resistance of Wheat to Infection with Brown
Rust, by V. F. Rashevskaya, V. P. Nilova, 11pp
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SLA TT-64-20427

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(FDD 25086)

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by V. Ya. Aleksandrov, 72 pp.

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The Tasks of the Biological Science, Depts of the Academy of Sciences, SSSR, in the Light of the 19th Congress of the KPSS and the Brilliant Ideas in the New Work of I. V. Stalin, "Economic Problems of Socialism in the USSR," by A. I. Oparin, 44 pp.

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Self-elimination in the Root System of Plants by
I.W. Muromtsev.

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Oct. 62

Microbe-Antagonists in Soil and Antibiotic Substances in Plant Industry, by N. A. Krasil'nikov.

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Scientific - Biology

Oct 53 CTS

6701

Microbes-Antagonists and Their Antibiotic
Influences in Control of Phytopathogenic
Microbes, by R. O. Mirzabekian

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Mar/Apr 1953, pp 67-88. Ref 5M 50828.

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Scientific - Biology

Dec 1954 CTS

Vegetative Poultry Hybridization, by K. BRUCHNOV,
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PO Box 271, East Orange, N. J.

Sci - Biology

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